

THE COGNITIVE VALUE OF INDEXICAL SENTENCES: KAPLAN VERSUS HUSSERL

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INTRODUCTION

The question I address in this paper is: What is the cognitive or informative value of sentences with indexical terms as used in a certain context. The cognitive or informative value of a sentence is something which someone who understands a sentence apprehends. We might use here Frege's identity criterion for propositions: two sentences have different cognitive values if it is possible for someone to judge the one to be true, and the other to be false (given that he has understood the terms, and that no logical truths form part of the sentences; further, the judgments have to be made at the same time). Indexicals are those terms whose referent can only be determined given a context of speaker, addressee, time, position, etc.; they may be pure ones such as 'I,' 'here,' 'now,' 'yesterday,' 'you,' in so far as it has the same sense as 'thou,' or they may be demonstratives such as 'he,' 'there,' 'this'; for the terms of the latter category to refer, some kind of demonstration is needed. In this paper I mainly deal with pure indexicals. First, I introduce some problems which show that Kaplan's notion of character, that is, the linguistic meaning of a sentence, is not always the right type of entity to possess cognitive value. Next, I will bring some ideas of the later Husserl to the fore which have bearing on these problems.

Husserl's earlier ideas on indexicals, in the *Logical Investigations*, are comparatively well known [Woodruff Smith and McIntyre 1982, Philipse 1982 and Mulligan and Smith 1986]. In the *Investigations* indexical judgments are characterized as subjective, and they do not play an important role in the philosophy of the *Investigations* in general. This stands in contrast to Husserl's ideas on indexicality after the *Investigations*, for then he considers all our empirical judgments to be of an indexical nature. Unfortunately, Husserl is not very explicit about his conception of indexicality after the publication of the *Logical Investigations*. We have to rely on a rather short remark in his *Formal and Transcendental Logic*, on a few manuscripts, and we have to extrapolate his ideas on the *ego* and those on intersubjectivity in the *Cartesian Meditations* and his *Crisis*.

I CHARACTER AND COGNITIVE SIGNIFICANCE

Kaplan has introduced his notion of character in order to explain the difference between the two judgments

- (1) She is in danger
- (2) I am in danger

in the following situation: Suppose I see in a window a woman threatened by Dracula, and I judge (1); suddenly I realize that the vampire is going to bite me, and I judge (2). Only then do I take the appropriate actions. When we consider the Russellian proposition which has the referent of 'she' as its part, there is no difference between the propositions expressed, for the referent of 'I' is the same as the referent of 'she.' In Kaplan's terminology, the content of the two judgments is the same; therefore, the truth-value of the two sentences is the same. Because the contents do not differ, it is not the content which can explain why there is a difference in cognitive value between the two sentences. The character, the constant linguistic meaning, of 'I' is different, though, from the character of 'she'; each presents the content in a different manner. This explains why different actions follow in case I judge (2) instead of (1). Kaplan defines *character* as a function that

takes us from contexts to contents. But he also confesses that equivalent characters are represented by the same function, which means that equivalent characters are identified by this definition.

This notion of character must be understood in the sense that different contents might be given under the same character. Kaplan gives the following example: Castor and Pollux both make the judgment 'My brother was born before I was.' Only one of these judgments can be true, so their contents clearly must be different. In so far as the two sentences are tokens of the same type, their characters are the same. According to Kaplan, the character of a word or sentence can be identified with its cognitive significance. This, I think, can be unproblematically done in most cases, namely if we do not take indexical sentences into consideration. But if we do so, characters are not enough: When I say today 'Tomorrow I will stop smoking'; and, tomorrow I utter the same words, it hardly can be said that my intentions are still the same. Although it seems that these cases can be solved by bringing in the content of a judgment or an intention, I think this will not do. My judgment or intention need not involve any exact date. You can perfectly understand what my intentions are, without knowing the exact date of tomorrow.

In the case of the sentence-type, 'My brother was born before I was,' where indexicals are involved, Kaplan identifies character with something he calls 'cognitive state,' or 'cognitive content.' In general, he conceives of the character as being what gives cognitive significance to a sentence or judgment; character belongs to a sentence-type. So, for Kaplan, the cognitive significance of the two judgments made by Castor and Pollux is the same.

On my conception of cognitive significance, the cognitive significance of the two judgments made by Castor and Pollux is not the same, which means that character and cognitive significance cannot be identified. I think that the cognitive significance of a sentence must be something that can explain communication. It should explain that you and I can apprehend the same thought or proposition together with its cognitive value, although we have to use different signs, with their different linguistic meanings, to express the same proposition. Also, I believe that it is important that our conception of proposition and cognitive value can help us to guarantee that the same proposition can be

expressed at a later time. This means that I will criticize Kaplan's notions of *character* and *cognitive significance*.¹ It will turn out that Kaplan's notion of *cognitive significance* is too coarse, when it is conceived of as a function from contexts to contents, or that it is too subjective, just like Perry's belief-state [Perry 1979]. *Cognitive significance* should neither be explained by appeal to entities which are completely independent of our judging and believing, as Frege did with his notion of *Sinn* in 'Der Gedanke.' Nor should it be explained in such a way that communication and retainment of belief are impossible in the case of indexical sentences. What I am looking for is a notion of *cognitive significance* which is neither absolute, nor subjective.

II COMMUNICATION AND RETAINMENT OF BELIEF

The examples I take as paradigmatic are not those of a speaker expressing his beliefs, but those in which people are communicating. The most simple case is a dialogue. I can use sentence (1) and (2), again. Suppose a friend of mine is passing by and sees what is going to happen. At that moment I only believe that the woman in the window is in danger, and judge (1); I do not hold (2) to be true. My friend does not want me to be kissed by Dracula, and says to me: (3) 'You are in danger (Dracula is going to bite you).' Now, when has my friend succeeded in giving me the information he wants me to have;² when has there been real communication? When do we have the same belief, not in the sense in which our psychological states are the same, but in the sense that we have the same opinion or knowledge. It is not enough that the content of my judgment is the same as his, for in the case I judge 'she is in danger,' and act according to it, that is, do not act at all, my friend will conclude that I have not got his message. He will repeat (3), and address me more explicitly. Neither can we say that the characters or belief-states must be the same, in order that communication succeeds: one sentence has the character of 'you' as its part, the other the character of 'I.' The question is: What is needed in order for communication to succeed, in order that I receive the appropriate information?

Let me take another example, using the following sentences:

- (4) It is raining here
- (5) It is raining there
- (6) It is raining in Singapore

Suppose my lover is travelling all over the world. Unbeknown to me, he happens to be in Singapore this very moment, and is making a phone-call with me. He utters (4), and all he wants to inform me about is that it is raining where he is—this information differs, for example, from the information he gives to the weather-forecast station for which he is working. (It might even be the case that he actually does not want me to know that he is in Singapore, because he once has had a girl-friend there, and knows me to be jealous.) If I have understood him well, I judge (5). (6) I can judge only after I have received the information that my lover is in Singapore, and have made the appropriate inference. The information of (6) is not contained in that of (4). Or, someone reporting my belief should not say 'She believes that it is raining in Singapore,' when he wants to report my saying (4). According to Kaplan, the contents of sentence (4)–(6) are the same, whereas their characters differ. This means that the notions of *character* and *content* are not enough to explain that (4) and (5) have something in common, which they do not share with (6).

My criticism of the theories which only distinguish character and content also applies to judgments standing on their own, namely in so far as they involve belief-reports.³ In reporting a belief, an 'I', for example, must systematically be replaced by a 'you,' and a 'here' by a 'there.'

III HUSSERL'S LATER IDEAS ON INDEXICALS

Husserl's later theory of indexicals is of importance, because there he no longer has a subjective conception of indexicals. At the same time, he takes all our empirical judgments to be of an essentially indexical nature. The later Husserl has a theory of intersubjectivity and of orientation in space and time, which does not make an appeal to entities existing independently of a living and judging person. He takes really seriously the relation between speaker and hearer, that is, between the meaning of 'I' and 'you,' of 'here' and 'there,' of 'now' and 'then.'

Husserl's later theory of indexicals can be divided into five moments:

- (1) the notion of horizon;
- (2) the acting and moving body as orientation-centre;
- (3) space and time possess no intrinsic differences.

These three moments lead to the idea that all objects are perceived as part of a perceptual field, and that all our judgments are indexical. All judgments seem to be subjective, now. Therefore, we need two more moments:

- (4) the constitution of another ego;
- (5) horizontal intentionality/ situation-horizon.

The last moment gives intersubjective meaning to indexical judgments in constituting the intersubjective world as we experience it, what is known as the *Lebenswelt*.

When we perceive an object, it belongs essentially to such a perception that it is possible to have other perceptions of that object according to its type. When we perceive something as a house, there is a horizon of perceptions involving other sides of it. The objectual horizon is a correlate of such horizontal acts. Besides the inner-horizon of an object (for example, the other sides of the house), there is also an outer-horizon of this object consisting in the relations this object has to other objects (relations of this house to the trees and the other houses surrounding it) [Husserl 1987, § 19, Husserl 1962, § 47].

In a manuscript, dated May 1912 [Husserl 1976], Husserl defends the thesis that all empirical judgments, that is, all judgments about the spatio-temporal world are tied to experiential acts, and, as such, contain indexical elements. Even universal judgments, such as 'All bodies have weight,' have a horizon of experience tied to a here and now of the judging person. The point of reference of empirical judgments is the experiencing body (*der Leib als Orientierungszentrum, als Nullpunkt*) which constitutes an oriented, egocentric space by moving around. Via the experiencing and moving body there is a system of actual and possible perceptions intrinsic to a given perception: a percep-

tual field [Husserl 1985, § 8, 22]. "Alles Räumliche ist ein Dort zum Hier in dreidimensionaler Mannigfaltigkeit", as Husserl says [Husserl 1976, p. 522; see also Schuhmann 1993, pp. 120–2].

How, then, can these empirical judgments, which are rooted in oriented, egocentric space of persons ever become objective? How can we ever understand each others judgments, if they are ego-oriented? In the above-mentioned manuscript Husserl says to this: Just in so far as there are between my orientations and those of others certain exchange-relations (*Austauschbeziehungen*), which everyone can apprehend from his own orientation, only so far is there understanding and is intersubjective judging possible.

Only much later, in the fifth Cartesian Meditation, is this idea given depth by the constitution of the *alter ego*. The other is not just an *ego*, for I cannot have the experiences of someone else; the other is, according to Husserl, a *modified I*. Just as a painted landscape is not a real landscape, to make a comparison with Twardowski's use of the term modification, so another I is not a real I (for me); even so, it is recognized as the image of an *ego*. I perceive the body of the other *ego*, but I only apperceive his states of mind, that is, I perceive those states of mind along with my perceptions of his body [Husserl 1987, § 44, 52]. It is on the basis of empathy (*Einfühlung*) that it is possible to understand another *ego* and his assertions. Because my living body is a centre of orientation it is essentially a here, whereas the body of someone else (*Körper*) has the mode of a there. Because my living body is essentially a moving and acting body, I can change my position so that I can make every there into a here, and my here into a there; this means that space is decentralized [Husserl 1987, § 53].⁴ Through this notion of change of position (*Stellungswechsel*), we are able to make sense of Husserl's rather short remark on indexicality in his *Formal and Transcendental Logic*:

"Man beachte z. B. das ungeheure Reich der okkasionellen Urteile, die doch auch ihre intersubjektive Wahrheit und Falschheit haben. Sie beruht offenbar darauf, daß das ganze tägliche Leben des Einzelnen und der Gemeinschaft auf eine typische Gleichartigkeit der Situationen bezogen ist, derart daß jeder, der in die Situation eintritt, als normaler Mensch *eo ipso* die ihr zugehörigen und allgemeinen Situationshorizonte hat. Man kann diese Horizonte nachträglich explizieren, aber die konstituierende Horizontintentionalität,

durch die die Umwelt des täglichen Lebens überhaupt Erfahrungswelt ist, ist immer früher als die Auslegung des Reflektierenden; und sie ist es, die den Sinn der okkasionellen Urteile wesentlich bestimmt, immer und weit über das hinaus, was jeweils in den Worten selbst ausdrücklich und bestimmt gesagt ist und gesagt werden kann." [Husserl 1974, § 80]

Summarized, Husserl says that indexical judgments are intersubjectively true or false, because our daily life has reference to a typical similarity of situations, so that whoever enters into such a situation has, as a normal human being, the horizon which belongs to this situation. *Through the horizontal intentionality our surrounding world of daily life can be said to be the world we experience as being real.* This is what gives meaning to our occasional judgments.

IV HUSSERL'S THEORY APPLIED TO THE QUESTION OF COGNITIVE SIGNIFICANCE OF INDEXICAL SENTENCES

At the beginning of this paper, I tried to make the notion of cognitive significance clearer by using Frege's identity-criterion for propositions. According to this criterion, it is easy to explain why the sentences (1) and (2), the 'I'- and the 'she'-sentence, differ in cognitive value. But the criterion says nothing about the third sentence, the 'you'-sentence, expressed by my friend, in relation to the other two; the criterion speaks only of one judging person.

There is in Frege's writings a tension between his identity-criterion, on the one hand, and his idea that 'Today is fine,' uttered on the 22th of June 1994, and 'Yesterday was fine,' uttered on the 23rd of June 1994, express the same thought or proposition. It is very possible for someone to judge the former to be true, and the latter to be false; it is always possible to lose track of a day.

What is needed in order that it is no longer possible that someone judges the first sentence to be true and the second to be false? Is it necessary that the judging person, or someone who listens to him, has complete knowledge of the context in order to fully understand what is said? Do we have to know that 'Yesterday' stands for the 22th of June in order to understand the sentence 'Yesterday was fine' as uttered in

the context described? Intuitively, we might say, that the 22th of June must at least be apprehended as the day before, as the day which precedes the day on which the sentence 'Yesterday was fine' is uttered. Complete knowledge of the context is not necessary. In the example of my friend making a telephone-call with me, I need not have any specific knowledge of the place where he calls from, that it is Singapore, in order to get his message. And I need not know what time it is in order to get the message of my friend who is warning me by saying 'You are in danger now.' But complete knowledge of the context is also not sufficient to get the message. I need to know that the time of warning is now, and I need to know that the person addressed is me. What is needed is special knowledge of the time and place referred to, and similar knowledge of the person addressed: I have to know how the time, place and person in question are related to me, here and now. Here, I think, we can use Husserl's theory of indexicality.

Some American philosophers [Smith and McIntyre 1982] have compared Husserl's notion of *horizon* with the notion of *possibility* in possible world semantics. Husserl would probably have said in answer to this that the possibilities in possible world semantics are just empty, logical possibilities, where the actual world is just one possibility among others. These possibilities, therefore, do not have much in common with the objectual correlates of the possible perceptions that belong as a horizon to the actual perception of an object.

For the purposes of indexicality, at least, I prefer to compare Husserl's notion of *horizon*, or, to be more precise, that of *situation-horizon*, with the notion of *context*. A situation-horizon contains a person with a here and now, and refers to other situations, where that person has another point of reference. A situation-horizon is necessarily tied to an experiencing person whose living body is the zero-point of reference. Here we can see the main difference from the notion of context as it functions in Kaplan's system, where the context is an objective notion, conceptually unrelated to any judging or living person. For example, now and here are not especially indicated. This objective notion of context, completely unrelated to a person, is implied by Kaplan's logic which essentially is a possible world semantics with an objective system of times and places.

■ A sentence like 'He is taller than you are' makes sense only if the

speaker apprehends a third person and the person addressed, whether he perceives them or mentally apprehends them. Besides, the person addressed must be apprehended as related to me in a special way; the same holds for the apprehension of the third person: he must be apprehended as 'third person.' In so far as these perceptions are intrinsically related to other perceptions, they create a surrounding space, relating the addressee and the third person (over there), and both of them to me. Personal pronouns express relational concepts which exist only with reference to each other, as Gurwitsch says [Gurwitsch 1977, pp. 123, 124].

How is it possible for me, the addressee, to understand the speaker and get his message? I apprehend the one who is speaking to me as a living body with a zero-point of reference of its own, such that *I could be in his situation. I apprehend the sounds he utters as words and his facial expressions and bodily movements as signs.* Along with these perceptions, in perceiving these signs, I apprehend what the speaker is pointing at and who he is addressing, by empathy. It should not be forgotten that these apperceptions are not real perceptions. I essentially cannot have the other person's perceptual acts, but I can imagine having an act of the same type by imagining myself to be in a similar situation. In order to understand a 'you'-sentence or a 'there'-sentence uttered by someone who addresses me, I have to relate his point of reference to my point of reference, so that a 'you' becomes an 'I,' and a 'there' becomes a 'here.'

In the explanation given above, I acknowledge non-linguistic signs such as facial expressions. When demonstratives are involved, it is even more clear that we need non-linguistic signs, beside linguistic signs, in order to get a message, in order to apprehend the cognitive significance of what is said. For example, someone says in my presence: 'That is the house where I was born,' standing before a certain house, and looking at it. In perceiving him as turned with his face towards that house, I apperceive the act perception which has the house as object. The facial expressions and the position and movements of the body of the speaker function as signs, which, together with the words he uses, form the language or medium by which I can understand what he is saying, what his message is. Why should we merely take linguistic signs into consideration? Even Frege allows non-linguis-

tic signs in order to complete indexical sentences [see his 1976, pp. 64, 76].

Wolfgang Künne has a more extreme position [in his 1982 and 1992]. He says that the linguistic sign needs to be completed by the object meant, so that we have what he calls 'hybrid proper names,' that is, names consisting of a linguistic sign and the individual object itself. My theory has the advantage over Künne's of explaining the informativeness of 'that man is that man,' 'you are you,' 'he is he' in appropriate circumstances. These sentences need some supplementation of non-linguistic signs; in order for the sentence 'he is he' to be informative, different non-linguistic signs should accompany the first and the second 'he'-occurrence.

What is needed for communication to succeed is that I relate the situation the speaker is in with the situation I am in, in the right way; through this exchange a 'you' becomes an 'I,' and an 'I' becomes a 'you,' a 'here' a 'there,' and a 'there' a 'here.' What is needed for retention of belief is that I relate the situation I was in before with the situation I am in now, in the appropriate way, so that 'today,' that is, the word used yesterday, becomes 'yesterday,' and 'tomorrow' becomes 'today.'

Are we able now to explain the cognitive value of indexical sentences, such that the cognitive significance can be constant and communication can be explained even when indexicals are used? We might add, as a presupposition, to Frege's identity-criterion that the judging person should not only understand the words used, but that he also should apprehend the relations between the different situations: the relation of myself to a speaker, addressee, and third person; the relation of now to earlier and later times; and the relation of here to other places surrounding it. This kind of knowledge is no longer linguistic, but it is necessary in order to utter and understand sentences with indexical terms and indexical verbs like 'to come' and 'to go.' This implies that linguistic and non-linguistic knowledge are on a par, or at least not so far apart from each other as we always have thought.

NOTES

(1) Other criticism on the notion of character as cognitive significance is given by Felicia Ackerman [Ackerman 1989]: the notion of character does not explain the informativeness of 'Cicero is Cicero' or 'you are you' (in appropriate circumstances).

(2) My notion of information differs from that used by Perry in [his 1977]; for Perry, sentences with the same content contain the same information.

(3) Kaplan deals with the topic of belief-reports, see for example chapter xx in [Kaplan 1989a].

(4) These ideas are also put forward by Evans and Charles Taylor [Evans 1982, p. 156]

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